



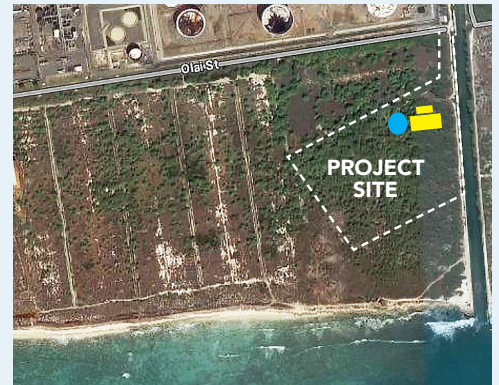
Kalaeloa Seawater Desalination Facility

The Honolulu Board of Water Supply (BWS) and Kalaeloa Desalco LLC is planning to build an innovative desalination water facility in Campbell Industrial Park that will produce 1.7 million gallons of fresh water daily. Known as the Kalaeloa Seawater Desalination Facility, the plant will be a new source of fresh water to support the needs of Campbell Industrial Park.



Where will the plant be built?

The new facility will be located on a 20-acre empty lot in Campbell Industrial Park owned by BWS at 91-447 Olai Street (TMK: 9-1-31:28). The project site will include an administration building, laboratory, office, a building for the processing equipment, along with grading, drainage, roads, parking, utilities, fencing, landscaping, and security systems.



Why do we need this project?

The demand for fresh water from BWS's 'Ewa system is approaching capacity, as the district's population is expected to grow by about 30 percent, or 50,000 people, by 2040. The seawater desalination plant will supplement BWS's ongoing efforts to encourage conservation, use recycled water for non-potable water demands, and leverage brackish and saline aquifer supplies where possible.

What is the timeline for this project?

In 2023, BWS awarded a design-build-operate-maintain services contract to Kalaeloa Desalco LLC to build and operate the facility, with a targeted operational start date in 2027.

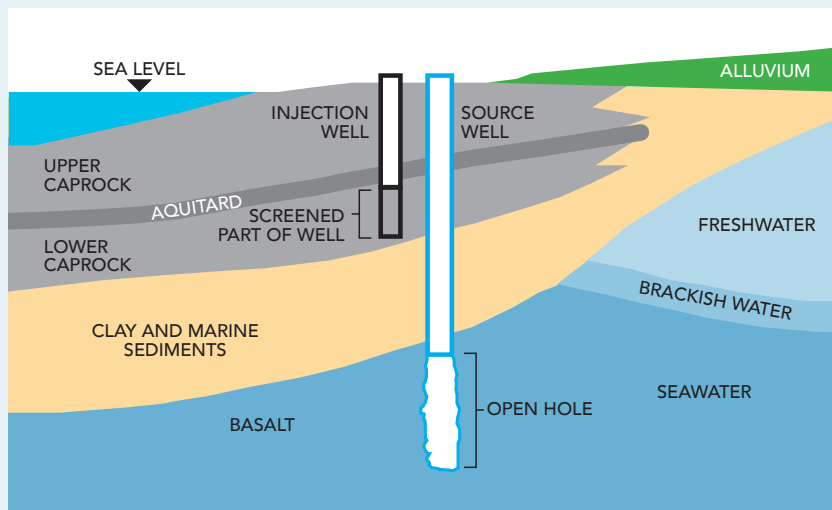
What are the benefits of seawater desalination?

For the City & County of Honolulu, the Kalaeloa Seawater Desalination Facility will produce high-quality drinking water for local customers, diversify O'ahu's fresh water production sources, and improve Hawai'i's water resilience to climate change.

What is seawater desalination?

Desalination describes the process of producing fresh water from a saline source, such as seawater. The process uses reverse osmosis, which pressurizes seawater to safely separate fresh water from the mineral salts when it is passed through a semi-permeable membrane within the system.

The reverse osmosis membrane separation method that the Kalaeloa Seawater Desalination Facility will use is the widely accepted technology for converting seawater into fresh water.



Will desalinated water corrode my pipes?

Untreated desalinated water is highly purified, meaning very low in dissolved salts/solids. When left in this pure state, desalinated water has a high potential to dissolve solid materials and corrode pipes and other distribution equipment. The Kalaeloa Seawater Desalination Facility will be stabilizing its water by adding naturally occurring minerals (i.e., calcium and/or magnesium) prior to the water being put into the distribution system. The stabilized water that goes out to customers should not damage plumbing systems. A pilot test will be conducted to confirm no detrimental impact.

Why take water from the ocean?

The ocean provides a limitless supply of seawater, so producing fresh water using desalination is arguably more sustainable than removing water from ground water aquifers.

In addition, the Kalaeloa Seawater Desalination Facility includes brine concentrate injection wells that will not affect the nearshore environment.

How can you contribute?

A Customer Survey will take place in the upcoming months. The survey will help identify the customer's water quality concerns and material(s) of property piping and water using equipment and processes on site. The results will be used during the project's pilot test to assure there will be minimal deviation to customers' water quality.

A second Open House will be scheduled after the Customer Survey is completed and the results have been received and analyzed. The purpose of the second Open House will be to provide an overview of customer concerns and how the information gathered will be used to shape the pilot testing.